# FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) RENEWAL OFFICE OF AIR QUALITY

#### Vectren Corporation, d.b.a. Indiana Gas Company, Incorporated 7955 East Maloney Road Brownsburg, Indiana 46112

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F 063-14115-00018

Original signed by Paul Dubenetzky

Issued by:

Paul Dubenetzky, Branch Chief

Office of Air Quality

Issuance Date: August 7, 2001

Expiration Date: August 7, 2006

#### **TABLE OF CONTENTS**

General Information [326 IAC 2-8-3(b)] Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)] Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)] FESOP Applicability [326 IAC 2-8-2] Prior Permit Conditions	4
GENERAL CONDITIONS  Permit No Defense [IC 13]  Definitions [326 IAC 2-8-1]  Permit Term [326 IAC 2-8-4(2)]  Enforceability [326 IAC 2-8-6]  Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]  Severability [326 IAC 2-8-4(4)]  Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]  Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)]	6
Compliance Order Issuance [326 IAC 2-8-5(b)] Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)] Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)] Annual Compliance Certification [326 IAC 2-8-5(a)(1)] Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)] Emergency Provisions [326 IAC 2-8-12] Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)] Permit Modification, Reopening, Revocation and Reissuance, or Termination Permit Renewal [326 IAC 2-8-3(h)] Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1] Operational Flexibility [326 IAC 2-8-15] Permit Revision Requirement [326 IAC 2-8-11.1] Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2] Transfer of Ownership or Operational Control [326 IAC 2-8-10] Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16]	
SOURCE OPERATION CONDITIONS	6
Overall Source Limit [326 IAC 2-8] Opacity [326 IAC 5-1] Open Burning [326 IAC 4-1] [IC 13-17-9] Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)] Fugitive Dust Emissions [326 IAC 6-4] Operation of Equipment [326 IAC 2-8-5(a)(4)] Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61 Subpart M]	
g Requirements [326 IAC 2-8-4(3)] Performance Testing [326 IAC 3-6]	
	General Information [326 IAC 2-8-3(b)] Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)] Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(l)] FESOP Applicability [326 IAC 2-8-2] Prior Permit Conditions  GENERAL CONDITIONS Permit No Defense [IC 13] Definitions [326 IAC 2-8-1] Permit Term [326 IAC 2-8-4] Permit Term [326 IAC 2-8-6] Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)] Severability [326 IAC 2-8-4(4)] Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)] Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] Compliance Order Issuance [326 IAC 2-8-5(b)] Compliance Order Issuance [326 IAC 2-8-4(3)(C)(ii)] [326 IAC 2-8-4(5)(B)] Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(ii)] [326 IAC 2-8-5(a)(1)] Preventive Maintenance Plan [326 IAC 1-8-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)] Emergency Provisions [326 IAC 2-8-12] Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(iii)] Permit Modification, Reopening, Revocation and Reissuance, or Termination Permit Renewal [326 IAC 2-8-3(h)] Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1] Operational Flexibility [326 IAC 2-8-15] Permit Revision Requirement [326 IAC 2-8-11.1] Inspection and Entry [326 IAC 2-8-15] Permit Revision Requirement [326 IAC 2-8-10] Annual Fee Payment [326 IAC 2-8-19] [326 IAC 2-8-10] Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16]  SOURCE OPERATION CONDITIONS  1  source Limit [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16]  Popen Burning [326 IAC 4-1] [IC 13-17-9] Incineration [326 IAC 4-2] [326 IAC 3-8-5(a)(4)] Asbestos Abatement Projects [326 IAC 1-1-2(3)] Fugitive Dust Emissions [326 IAC 6-4] Operation of Equipment [326 IAC 2-8-5(a)(4)] Asbestos Abatement Projects [326 IAC 1-4-10] [326 IAC 18] [40 CFR 61 Subpart M]  g Requirements [326 IAC 2-8-4(3)]

Quarte	rly Devi	ation and Compliance Monitoring Report	28
Quarte	rly Rep	ort	27
Emerg	ency O	ccurrence Report	25
Certific	cation .		24
		on Limitations and Standards [326 IAC 2-8-4(1)] FESOP Limitations [326 IAC 2-8-4]	
SECTIO	ON D.2	FACILITY OPERATION CONDITIONS: Insignificant Activities	23
	<b>Record</b> D.1.4 D.1.5	Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16] Record Keeping Requirements Reporting Requirements	
	D.1.1 D.1.2	on Limitations and Standards [326 IAC 2-8-4(1)] FESOP Emission Limitations [326 IAC 2-8-4] Conditions Not Applicable Preventive Maintenance Plan [326 IAC 2-8-4(9)]	
SECTIO	ON D.1	FACILITY OPERATION CONDITIONS: Two (2) engines (CE-3 and CE-4)	21
	Stratos C.16	spheric Ozone Protection Compliance with 40 CFR 82 and 326 IAC 22-1	
	Record C.14 C.15	General Reporting Requirements [326 IAC 2-8-4(3)] General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5] General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]	
	Correc C.12 C.13	tive Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)] Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215] Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4, 5]	
	C.10 C.11	Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]  Monitoring Methods [326 IAC 3] [40 CFR 60][40 CFR 63]	

Vectren Corporation, d.b.a. Indiana Gas Company, Incorporated

Brownsburg, Indiana

Permit Reviewer: CAO/MES

Page 4 of 29 OP No. F 063-14115-00018

#### **SECTION A**

#### SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in Conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

#### A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary natural gas distribution source.

Authorized Individual: William Doty, Vice President

Source Address: 7955 East Maloney Road, Brownsburg, Indiana 46112

Mailing Address: 20 NW 4<sup>th</sup> Street, Evansville, Indiana 47708

General Source Phone Number: 812 - 491 - 4562

SIC Code: 4924 County Location: Hendricks

Source Location Status: Attainment for all criteria pollutants

Source Status: Federally Enforceable State Operating Permit (FESOP)

Minor Source, under PSD Rules;

Minor Source, Section 112 of the Clean Air Act

#### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

Two (2) 650 brake horsepower four (4) cycle natural gas-fired, rich burn naturally aspirated reciprocating internal combustion engines, identified as CE-3 and CE-4, with natural gas compressors.

#### A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

- (a) One (1) gasoline emergency generator, rated at 110 horsepower. [326 IAC 2-8-4]
- (b) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour and potentially emitting 0.023 tons of Ethylene Glycol per year to the atmosphere:
  - (1) One (1) line heater, capacity: 2.0 million British thermal units per hour.
  - (2) One (1) flare, capacity: 0.69 million British thermal units per hour.
  - (3) One (1) line heater, capacity: 0.5 million British thermal units per hour.
- (c) Combustion source flame safety purging on startup.
- (d) The following VOC and HAP storage containers: Two (2) storage tanks with capacities less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.
- (e) The following VOC and HAP storage containers: Vessels storing lubricating oil, hydraulic oils, machining oils and machining fluids.
- (f) Closed loop heating system.

Permit Reviewer: CAO/MES

Page 5 of 29 OP No. F 063-14115-00018

- (g) Heat exchanger cleaning and repair.
- (h) Process vessel degassing and cleaning to prepare for internal repairs.
- (i) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (j) Purge double block and bleed valves.
- (k) Filter or coalescer media changeout.
- (I) Numerous valves and flanges.

#### A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP) Renewal.

#### A.5 Prior Permit Conditions

- (a) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits.
- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued.

Page 6 of 29 OP No. F 063-14115-00018 Permit Reviewer: CAO/MES

#### **SECTION B**

#### **GENERAL CONDITIONS**

#### B.1 Permit No Defense [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

#### B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

#### B.3 Permit Term [326 IAC 2-8-4(2)]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

#### Enforceability [326 IAC 2-8-6] B.4

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

#### B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

#### B.6 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

#### B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

#### B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5(a)(4)]

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that (b) IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM,

Permit Reviewer: CAO/MES

Page 7 of 29 OP No. F 063-14115-00018

OAQ, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality.[326 IAC 2-8-4(5)(E)]

(c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

#### B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

#### B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
  - (1) Enforcement action;
  - (2) Permit termination, revocation and reissuance, or modification; and
  - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

#### B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

#### B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification covered the time period from the date of the first original final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Permit Reviewer: CAO/MES

Page 8 of 29 OP No. F 063-14115-00018

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification:
  - (2) The compliance status;
  - (3) Whether compliance was continuous or intermittent;
  - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
  - (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

#### B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

#### B.14 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contem-

Permit Reviewer: CAO/MES

Page 9 of 29 OP No. F 063-14115-00018

poraneous operating logs or other relevant evidence that describes the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section) or.

Telephone No.: 317-233-5674 (ask for Compliance Section)

Facsimile No.: 317-233-5967

Failure to notify IDEM, OAQ, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

Permit Reviewer: CAO/MES

Page 10 of 29 OP No. F 063-14115-00018

- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
    - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

#### B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report.

The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
  - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or

Permit Reviewer: CAO/MES

(2) Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

(c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

## B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
  - (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

#### B.17 Permit Renewal [326 IAC 2-8-3(h)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, IN 46206-6015

Permit Reviewer: CAO/MES

Page 12 of 29 OP No. F 063-14115-00018

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
  - (1) A timely renewal application is one that is:
    - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
    - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
  - (2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9] If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as needed to process the application.

#### B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

#### B.19 Operational Flexibility [326 IAC 2-8-15]

- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:
  - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
  - (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;

Page 13 of 29 OP No. F 063-14115-00018

- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-8-15(b), (c)(1), and (d).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional conditions:
  - (1) A brief description of the change within the source;
  - (2) The date on which the change will occur;
  - (3) Any change in emissions; and
  - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) Emission Trades [326 IAC 2-8-15(c)]
  The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (d) Alternative Operating Scenarios [326 IAC 2-8-15(d)]

  The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with

Permit Reviewer: CAO/MES

Page 14 of 29 OP No. F 063-14115-00018

326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

#### B.20 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed 326 IAC 2 and 326 IAC 2-8-11.1.

#### B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

#### B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-11(b)(3)]

#### B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

(a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

Permit Reviewer: CAO/MES

Page 15 of 29 OP No. F 063-14115-00018

- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

Page 16 of 29 OP No. F 063-14115-00018

#### **SECTION C**

#### **SOURCE OPERATION CONDITIONS**

#### **Entire Source**

#### Emissions Limitations and Standards [326 IAC 2-8-4(1)]

#### C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

- (a) Pursuant to 326 IAC 2-8:
  - (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period.
  - (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
  - (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (b) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.
- (c) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

#### C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3(a)(2)(A) and (B) are not federally enforceable.

#### C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

Page 17 of 29 OP No. F 063-14115-00018

#### C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

#### C.6 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

#### C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management Asbestos Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 1410-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet

Permit Reviewer: CAO/MES

Page 18 of 29 OP No. F 063-14115-00018

on all facility components.

(f) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator,
prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited, pursuant to the provisions of 40 CFR 61, Subpart M,
is federally enforceable.

#### Testing Requirements [326 IAC 2-8-4(3)]

#### C.8 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ, not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

#### Compliance Requirements [326 IAC 2-1.1-11]

#### C.9 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

#### Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

#### C.10 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

Page 19 of 29 OP No. F 063-14115-00018

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

#### C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing performed required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

#### Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

#### C.12 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

#### C.13 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

#### Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

#### C.14 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

Permit Reviewer: CAO/MES

Page 20 of 29 OP No. F 063-14115-00018

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

#### C.15 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) The first report covered the time period commencing on the date of issuance of original FESOP and ending on the last day of the reporting period. All subsequent reporting periods shall be based on calendar years.

#### **Stratospheric Ozone Protection**

#### C.16 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

Permit Reviewer: CAO/MES

Page 21 of 29 OP No. F 063-14115-00018

#### **SECTION D.1**

#### **FACILITY OPERATION CONDITIONS**

#### Facility Description [326 IAC 2-8-4(10)]:

Two (2) 650 brake horsepower four (4) cycle natural gas-fired, rich burn naturally aspirated reciprocating internal combustion engines, identified as CE-3 and CE-4, with natural gas compressors.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### Emission Limitations and Standards [326 IAC 2-8-4(1)]

#### D.1.1 FESOP Emission Limitations [326 IAC 2-8-4]

- (a) The throughput of natural gas delivered to the two (2) engines (CE-3 and CE-4) shall be limited to less than a total of 50.67 million cubic feet (51,684 million British thermal units) per consecutive twelve (12) month period, the natural gas heating value shall not exceed 1,020 British thermal units per cubic feet, the CO emission rate shall not exceed 3.72 pounds per million British thermal units and the NO $_{\rm X}$  emission rate shall not exceed 3.80 pounds per million British thermal units. This will limit the potential to emit CO from the two (2) engines to less than 96.1 tons per year, the potential to emit NO $_{\rm X}$  from the two (2) engines to less than 98.3 tons per year and total source potential to emit CO and NO $_{\rm X}$  to less than 100 tons per year. These limits will also limit the potential to emit PM $_{\rm 10}$  from the two (2) engines to less than 0.245 tons per year, the potential to emit SO $_{\rm 2}$  from the two (2) engines to less than 0.765 tons per year and the potential to emit VOC from the two (2) engines to less than 0.765 tons per year. Therefore, the requirements of 326 IAC 2-7 (Part 70) are still not applicable.
- (b) Pursuant to FESOP 063-6134-00018, issued on December 9, 1996, the two (2) engines (CE-3 and CE-4) shall use natural gas only.

#### D.1.2 Conditions Not Applicable

Condition D.1.1 of F 063-6134-00018, issued on December 9, 1996, which states, "The throughput of natural gas delivered to the four (4) engines shall not exceed 54.8 million cubic feet (55,800 million British thermal units) per rolling 12-month total. This is with natural gas with a heat value of 1020 British thermal units per cubic feet. This throughput is equivalent to a nitrogen dioxide source emission rate of 90.75 tons per rolling 12-month total. Therefore, the requirements of 326 IAC 2-7 do not apply," and Condition D.1.2 of F 063-6134-00018, issued on December 9, 1996, which states, "The throughput of natural gas delivered to the four (4) engines shall not exceed 54.8 million cubic feet (55,800 million British thermal units) per rolling 12-month total. This is with natural gas with a heat value of 1020 British thermal units per cubic feet. This throughput is equivalent to a carbon monoxide source emission rate of 90.75 tons per rolling 12-month total. Therefore, the requirements of 326 IAC 2-7 do not apply," are no longer applicable because, due to a change in the AP-42 emission factors for this process, the natural gas throughput must be limited as required by Condition D.1.1 of this FESOP. The limitations in Condition D.1.1 make the requirements of 326 IAC 2-7 still not applicable. Therefore, Conditions D.1.1 and D.1.2 of F 063-6134-00018, issued on December 9, 1996, are hereby rescinded.

#### D.1.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

#### **Compliance Determination Requirements**

There are no specific Compliance Determination Requirements applicable to these emission units.

#### Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

There are no specific Compliance Monitoring Requirements applicable to these emission units.

#### Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

#### D.1.4 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records of the natural gas delivered to the two (2) engines. The Permittee shall maintain records in accordance with (1) and (2) below. Records maintained for (1) and (2) shall be taken monthly and shall be complete and sufficient to establish compliance with the NO<sub>X</sub> and CO emission limits established in Condition D.1.1.
  - (1) The amount and heating value of the natural gas delivered to the two (2) engines each month; and
  - (2)  $NO_x$  and CO emissions from the total of the two (2) engines.
- (b) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### D.1.5 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Page 23 of 29 OP No. F 063-14115-00018

#### **SECTION D.2**

#### **FACILITY OPERATION CONDITIONS**

#### Facility Description [326 IAC 2-8-4(10)]: Insignificant Activities

- (a) One (1) gasoline emergency generator, rated at 110 horsepower. [326 IAC 2-8-4]
- (b) Natural gas-fired combustion sources with h **BRANCH** eat input equal to or less than ten (10) million Btu per hour and potentially emitting 0.023 tons of Ethylene Glycol per year to the atmosphere:
  - (1) One (1) line heater, capacity: 2.0 million British thermal units per hour.
  - (2) One (1) flare, capacity: 0.69 million British thermal units per hour.
  - (3) One (1) line heater, capacity: 0.5 million British thermal units per hour.
- (c) Combustion source flame safety purging on startup.
- (d) The following VOC and HAP storage containers: Two (2) storage tanks with capacities less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.
- (e) The following VOC and HAP storage containers: Vessels storing lubricating oil, hydraulic oils, machining oils and machining fluids.
- (f) Closed loop heating system.
- (g) Heat exchanger cleaning and repair.
- (h) Process vessel degassing and cleaning to prepare for internal repairs.
- (i) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (j) Purge double block and bleed valves.
- (k) Filter or coalescer media changeout.
- (I) Numerous valves and flanges.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### Emission Limitations and Standards [326 IAC 2-8-4(1)]

#### D.2.1 FESOP Limitation [326 IAC 2-8-4]

The one (1) gasoline emergency generator shall not operate more than five hundred (500) hours per consecutive twelve (12) month period. Therefore, the total source CO and  $NO_x$  emissions will be less than one hundred (100) tons per year and the requirements of 326 IAC 2-7, Part 70, are not applicable.

Permit Reviewer: CAO/MES

Page 24 of 29 OP No. F 063-14115-00018

#### INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR QUALITY COMPLIANCE BRANCH**

#### FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) **CERTIFICATION**

Source Name: Vectren Corporation, d.b.a. Indiana Gas Company, Incorporated

7955 East Maloney Road, Brownsburg, Indiana 46112 20 NW 4<sup>th</sup> Street, Evansville, Indiana 47708 Source Address:

Mailing Address:

FESOP No.: F 063-14115-00018

1	his certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.
F	lease check what document is being certified:
9 A	Annual Compliance Certification Letter
9 T	est Result (specify)
9 F	Report (specify)
9 1	Notification (specify)
9 A	Affidavit (specify)
9 0	ther (specify)
	ify that, based on information and belief formed after reasonable inquiry, the statements and nation in the document are true, accurate, and complete.
Signa	ture:
Printe	ed Name:
Title/F	Position:
Date:	

Permit Reviewer: CAO/MES

Page 25 of 29 OP No. F 063-14115-00018

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

COMPLIANCE BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

## FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) EMERGENCY OCCURRENCE REPORT

Source Name: Vectren Corporation, d.b.a. Indiana Gas Company, Incorporated

Source Address: 7955 East Maloney Road, Brownsburg, Indiana 46112

Mailing Address: 20 NW 4<sup>th</sup> Street, Evansville, Indiana 47708

FESOP No.: F 063-14115-00018

If any of the following are not applicable, mark N/A

#### This form consists of 2 pages

Page 1 of 2

9	This is an emergency as defined in 326 IAC 2-7-1(12)
	CThe Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-
	451-6027 or 317-233-5674, ask for Compliance Section); and
	CThe Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile
	Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A Page 2 of 2 Date/Time Emergency started: Date/Time Emergency was corrected: Was the facility being properly operated at the time of the emergency? Υ Ν Describe: Type of Pollutants Emitted: TSP, PM-10, SO<sub>2</sub>, VOC, NO<sub>x</sub>, CO, Pb, other: Estimated amount of pollutant(s) emitted during emergency: Describe the steps taken to mitigate the problem: Describe the corrective actions/response steps taken: Describe the measures taken to minimize emissions: If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value: Form Completed by:

A certification is not required for this report.

Title / Position:

Date:

Phone:

Permit Reviewer: CAO/MES

Page 27 of 29 OP No. F 063-14115-00018

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE BRANCH

#### **FESOP Quarterly Report**

Source Name:	Vectren Corr	poration, d.b.a.	Indiana Gas	Company.	Incorporated

Source Address: 7955 East Maloney Road, Brownsburg, Indiana 46112

Mailing Address: 20 NW 4<sup>th</sup> Street, Evansville, Indiana 47708

FESOP No.: F 063-14115-00018

Facility: Two (2) engines (CE-3 and CE-4)

Parameter: Natural gas throughput

Phone:

Limit: Less than 47.2 million cubic feet (48,180 million British thermal units) per consecutive

twelve (12) month period, total

Natural gas throughput	Natural gas throughput	Natural gas throughput		
This Month	Previous 11 Months	12 Month Total		
	throughput	throughput		

9	No deviation occurred in this quarter.			
9	Deviation/s occurred in this quarter.  Deviation has been reported on:			
Submit	ted by:			
Title / F	Title / Position:			
Signatu	ure:			
Date:				

Attach a signed certification to complete this report.

Permit Reviewer: CAO/MES

Page 28 of 29 OP No. F 063-14115-00018

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE BRANCH

## FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Vectren Corporation, d.b.a. Indiana Gas Company, Incorporated Source Name: 7955 East Maloney Road, Brownsburg, Indiana 46112 Source Address: Mailing Address: 20 NW 4th Street, Evansville, Indiana 47708 FESOP No.: F 063-14115-00018 Months: \_\_\_\_\_ to \_\_\_\_ Year: \_\_\_\_ Page 1 of 2 This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period". 9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD. 9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD **Permit Requirement** (specify permit condition #) **Date of Deviation: Duration of Deviation: Number of Deviations: Probable Cause of Deviation: Response Steps Taken: Permit Requirement** (specify permit condition #) **Date of Deviation: Duration of Deviation: Number of Deviations: Probable Cause of Deviation: Response Steps Taken:** 

Vectren Corporation, d.b.a. Indiana Gas Company, Incorporated Brownsburg, Indiana Permit Reviewer: CAO/MES

9

Page 29 of 29 OP No. F 063-14115-00018

Page 2 of 2

	r age 2 or s
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
9 No deviation occurred in	this quarter.

Form Completed By: \_\_\_\_\_\_

Deviation has been reported on:

Deviation/s occurred in this quarter.

Title/Position:

Date:

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

## Indiana Department of Environmental Management Office of Air Quality

Addendum to the

Technical Support Document for Federally Enforceable State Operating Permit (FESOP)

Source Name: Vectren Corporation, d.b.a. Indiana Gas Company, Incorporated

Source Location: 7955 East Maloney Road, Brownsburg, Indiana 46112

County: Hendricks

FESOP: F 063-14115-00018

SIC Code: 4924

Permit Reviewer: CarrieAnn Ortolani

On June 21, 2001, the Office of Air Quality (OAQ) had a notice published in the Hendricks County Flier, Plainfield, Indiana, stating that Vectren Corporation, d.b.a. Indiana Gas Company, Incorporated, had applied for a Federally Enforceable State Operating Permit (FESOP) to operate a natural gas distribution source. The notice also stated that OAQ proposed to issue a FESOP for this operation and provided information on how the public could review the proposed FESOP and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this FESOP should be issued as proposed.

On July 17, 2001, R. J. Mahoney of Vectren Corporation, submitted comments on the proposed FESOP. The comments are as follows: The permit language, if changed, has deleted language as strikeouts and new language **bolded**.

#### Comment 1:

The following information should be changed to:

#### A.1 General Information:

Authorized Individual: William Doty, Vice President

Mailing Address: 20 NW 4<sup>th</sup> Street, Evansville, Indiana 47708

General Source Phone Number: 812 - 491 - 4562

#### Response 1:

The mailing address on the forms at the back of the FESOP have been changed in response to this comment. Section A.1 has been revised as follows:

#### A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary natural gas distribution source.

Authorized Individual: Regina J. Mahoney William Doty, Vice President
Source Address: 7955 East Maloney Road, Brownsburg, Indiana 46112
Mailing Address: 1630 North Meridian Street, Indianapolis, Indiana 46204

20 NW 4<sup>th</sup> Street, Evansville, Indiana 47708

General Source Phone Number: (317) 321-0590 812 - 491 - 4562

SIC Code: 4924 County Location: Hendricks

Source Location Status: Attainment for all criteria pollutants

Source Status: Federally Enforceable State Operating Permit (FESOP)

Minor Source, under PSD Rules;

Minor Source, Section 112 of the Clean Air Act

Permit Reviewer: CAO/MES

Page 2 of 6 OP No. F 063-14115-00018

#### Comment 2:

A.2 Emission Units and Pollution Control Equipment Summary:

The two (2) 650 BHP four (4) cycle natural gas-fired engines are naturally aspirated - they are not lean burn engines.

In a telephone conversation on July 26, 2001, R.J. Mahoney of Vectron Corporation indicated that, based on the AP-42 definitions of lean burn and rich burn engines, these engines are rich burn engines. According to AP-42, Section 3.2, July 2000, rich burn engines operate near the stoichiometric air-to-fuel ratio (16:1) with exhaust excess oxygen levels less than four percent (4%), while lean burn engines may operate up to the lean flame extinction limit, with exhaust oxygen levels of twelve percent (12%) or greater and an air to fuel ratio from 20:1 to 50:1. Rich burn engines may be either naturally aspirated or turbocharged, and these engines are naturally aspirated. The indication in the application that these are lean burn engines was incorrect, and there were no physical modifications leading to the changes in Response 2.

#### Response 2:

Due to this new information, the emission factors for a four (4) cycle rich burn engine should be used for the two (2) engines. The revised calculations are attached as TSD Addendum Appendix A. Prior to the issuance of the initial FESOP (F 063-6134-00018, issued on December 9, 1996), the potentials to emit of NO<sub>x</sub> and CO were greater than 100 tons per year. The limitations of that FESOP (F 063-6134-00018, issued on December 9, 1996) resulted in potentials to emit CO and NO<sub>x</sub> of less than 100 tons per year. Due to a change in the AP-42 emission factors for this process, the natural gas delivered to the two (2) engines (CE-3 and CE-4) must be limited to less than 50.67 million cubic feet (51,684 million British thermal units) per consecutive twelve (12) month period, total, the natural gas heating value must be limited to no more than 1,020 British thermal units per cubic feet, the CO emission rate shall not exceed 3.72 pounds per million British thermal units and the NO<sub>x</sub> emission rate shall not exceed 3.80 pounds per million British thermal units in order to limit the potential to emit CO from the two (2) engines to less than 96.1 tons per year, the potential to emit NO<sub>x</sub> from the two (2) engines to less than 98.2 tons per year and total source potentials to emit CO and NO<sub>x</sub> to less than 100 tons per year. These limits will also limit the potential to emit PM<sub>10</sub> from the two (2) engines to less than 0.245 tons per year, the potential to emit SO<sub>2</sub> from the two (2) engines to less than 0.015 tons per year and the potential to emit VOC from the two (2) engines to less than 0.765 tons per year. Therefore, the requirements of 326 IAC 2-7 (Part 70) are still not applicable. The following is the revised limited potential to emit table and an evaluation of the applicable rules:

Permit Reviewer: CAO/MES

	Limited Potential to Emit (tons/year)							
Process/facility	PM	PM <sub>10</sub>	SO <sub>2</sub>	VOC	СО	NO <sub>x</sub>	HAPs	
Two (2) engines (CE-3 and CE-4)	0.256	0.245	0.015	0.765	96.1	98.2	0.835	
Insignificant Activities	0.047	0.126	0.024	0.671	2.38	1.70	0.049	
Total Emissions	0.303	0.371	0.039	1.44	less than 100	less than 100	Single less than 10 Total less than 25	

Page 3 of 6

#### **Federal Rule Applicability**

- (a) There are still no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- There are still no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (b) (326 IAC 14, 326 IAC 20, 40 CFR 61 and 40 CFR Part 63) applicable to this source.

#### State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting), because the potential to emit NO<sub>x</sub> is limited to less than one hundred (100) tons per year.

326 IAC 2-8-4 (FESOP)

Pursuant to this rule, the amount of PM<sub>10</sub>, SO<sub>2</sub>, VOC, CO and NO<sub>X</sub> shall be limited to less than one hundred (100) tons per year. In addition, the amount of a single HAP shall be limited to less than ten (10) tons per year and the combination of all HAPs shall be limited to less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 2-7, do not apply.

- (a) The throughput of natural gas delivered to the two (2) engines (CE-3 and CE-4) shall be limited to less than 50.67 million cubic feet (51,684 million British thermal units) per consecutive twelve (12) month period, total, the natural gas heating value must be limited to no more than 1.020 British thermal units per cubic feet, the CO emission rate shall not exceed 3.72 pounds per million British thermal units and the NO<sub>x</sub> emission rate shall not exceed 3.80 pounds per million British thermal units, in order to limit the potential to emit CO from the two (2) engines to less than 96.1 tons per year, the potential to emit NO<sub>x</sub> from the two (2) engines to less than 98.2 tons per year and total source potentials to emit CO and  $NO_x$  to less than 100 tons per year. These limits will also limit the potential to emit  $PM_{10}$ from the two (2) engines to less than 0.245 tons per year, the potential to emit SO<sub>2</sub> from the two (2) engines to less than 0.015 tons per year, and the potential to emit VOC from the two (2) engines to less than 0.765 tons per year. Therefore, the requirements of 326 IAC 2-7 (Part 70) are still not applicable.
- Pursuant to FESOP 063-6134-00018, issued on December 9, 1996, the two (2) engines (b) (CE-3 and CE-4) shall use natural gas only.

(c) The one (1) insignificant, gasoline emergency generator shall not operate more than five hundred (500) hours per consecutive twelve (12) month period.

#### 326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR Part 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### State Rule Applicability - Individual Facilities

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

The potential to emit  $SO_2$  is less than twenty-five (25) tons per year and ten (10) pounds per hour. Therefore, the requirements of 326 IAC 7 are not applicable.

#### Changes to the FESOP in Response to Comment 2

Changes to the permit are as follows:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

Two (2) 650 brake horsepower four (4) cycle natural gas-fired, lean rich burn naturally aspirated reciprocating internal combustion engines, identified as CE-3 and CE-4, with natural gas compressors.

#### D.1.1 FESOP Emission Limitations [326 IAC 2-8-4]

- (a) The throughput of natural gas delivered to the two (2) engines (CE-3 and CE-4) shall be limited to less than a total of 47.2 million cubic feet (48,180 million British thermal units) 50.67 million cubic feet (51,684 million British thermal units) per consecutive twelve (12) month period, the natural gas heating value shall not exceed 1,020 British thermal units per cubic feet, the CO emission rate shall not exceed 3.72 pounds per million British thermal units and the NO<sub>χ</sub> emission rate shall not exceed 4.08 3.80 pounds per million British thermal units. This will limit the potential to emit CO from the two (2) engines to less than 96.1 tons per year, the potential to emit NO<sub>χ</sub> from the two (2) engines to less than 98.2 98.3 tons per year and total source potential to emit CO and NO<sub>χ</sub> to less than 100 tons per year. These limits will also limit the potential to emit PM<sub>10</sub> from the two (2) engines to less than 0.245 tons per year, the potential to emit SO<sub>2</sub> from the two (2) engines to less than 0.765 tons per year and the potential to emit VOC from the two (2) engines to less than 7.64 tons per year. Therefore, the requirements of 326 IAC 2-7 (Part 70) are still not applicable.
- (b) Pursuant to FESOP 063-6134-00018, issued on December 9, 1996, the two (2) engines

(CE-3 and CE-4) shall use natural gas only.

#### D.1.4 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records of the natural gas delivered to the two (2) engines. The Permittee shall maintain records in accordance with (1) and (2) below. Records maintained for (1) and (2) shall be taken monthly and shall be complete and sufficient to establish compliance with the NO<sub>X</sub> and CO emission limits established in Condition D.1.1.
  - (1) The amount and heating value of the natural gas delivered to the two (2) engines each month; and
  - (2)  $NO_x$  and CO emissions from the total of the two (2) engines.
- (b) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### D.2.1 FESOP Limitation [326 IAC 2-8-4]

The one (1) gasoline emergency generator shall not operate more than five hundred (500) hours per consecutive twelve (12) month period. Therefore, the total source  ${\bf CO}$  and  ${\bf NO}_{\rm X}$  emissions will be less than one hundred (100) tons per year and the requirements of 326 IAC 2-7, Part 70, are not applicable.

#### Comment 3:

Insignificant Activities:

- (d) there are two (2) 1,000-gallon storage tanks with annual throughput of less than 12,000 gallons.
- (f) there is a closed loop heating system only no cooling system please revise to reflect the clarification.

#### Response 3:

Items (d) and (f) of Section A.3 have been revised as follows:

- (d) The following VOC and HAP storage containers: **Two (2)** storage tanks with capacities less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.
- (f) Closed loop heating and cooling systems.

Upon further review, the OAQ has decided to make the following change to the FESOP: The permit language is changed to read as follows (deleted language appears as strikeouts, new language is **bolded**):

For clarity, Condition D.1.2 is revised as follows:

#### D.1.2 Conditions Not Applicable

Condition D.1.1 of F 063-6134-00018, issued on December 9, 1996, which states, "The throughput of natural gas delivered to the four (4) engines shall not exceed 54.8 million cubic feet (55,800 million British thermal units) per rolling 12-month total. This is with natural gas with a heat value of 1020 British thermal units per cubic feet. This throughput is equivalent to a nitrogen dioxide source

Vectren Corporation, d.b.a. Indiana Gas Company, Incorporated Brownsburg, Indiana Permit Reviewer: CAO/MES Page 6 of 6 OP No. F 063-14115-00018

emission rate of 90.75 tons per rolling 12-month total. Therefore, the requirements of 326 IAC 2-7 do not apply," and Condition D.1.2 of F 063-6134-00018, issued on December 9, 1996, which states, "The throughput of natural gas delivered to the four (4) engines shall not exceed 54.8 million cubic feet (55,800 million British thermal units) per rolling 12-month total. This is with natural gas with a heat value of 1020 British thermal units per cubic feet. This throughput is equivalent to a carbon monoxide source emission rate of 90.75 tons per rolling 12-month total. Therefore, the requirements of 326 IAC 2-7 do not apply," are no longer applicable because, due to a change in the AP-42 emission factors for this process, the natural gas throughput must be limited as required by Condition D.1.1 of this FESOP. The limitations in Condition D.1.1 make the requirements of 326 IAC 2-7 still not applicable. Therefore, Conditions D.1.1 and D.1.2 of F 063-6134-00018, issued on December 9, 1996, are hereby rescinded.

#### Appendix A: Emission Calculations Natural Gas-fired Reciprocating Engines

Company Name: Vectren Corporation, d.b.a. Indiana Gas Company, Incorporated

Address City IN Zip: 7599 East Maloney Road, Brownsburg, Indiana 46112

FESOP Renewal: F 063-14115
Plt ID: 063-00018
Reviewer: CarrieAnn Ortolani
Date: July 21, 2001

#### Emissions calculated based on heat input capacity (MMBtu/hr)

Four stroke Rich Burn Engines (CE-3 and CE-4)
Heat Input Capacity

MM Btwhr

6.6

Limit in Old FESOP 063-6134-00018

	Pollutant					
Emission Factor in lb/MMBtu	PM 9.91E-03	PM10 9.50E-03	SO2 5.88E-04	NOx 2.21E+00	VOC 2.96E-02	CO 3.72E+00
Potential Emission in tons/yr	0.286	0.275	0.017	63.9	0.856	108

Four stroke Rich Burn Engines (CE-3 and CE-4)
Heat Input Capacity

MM Btu/hr

5.9

Revised limit in FESOP 063-14115

	Pollutant					
	PM	PM10	SO2	NOx	VOC	СО
Emission Factor in lb/MMBtu	9.91E-03	9.50E-03	5.88E-04	2.21E+00	2.96E-02	3.72E+00
Potential Emission in tons/yr	0.256	0.245	0.015	57.1	0.765	96.1

	Emission Factor	Potential to Emit	Potential to Emit	
HAP	Four stroke rich burn	in old FESOP 063-6134-00018	in FESOP 063-14115	
	(lb/MMBtu)	(tons/yr)	(tons/yr)	
1,1,2,2-Tetrachloroethane	2.53E-05	7.31E-04	6.54E-04	
1,1,2-Trichloroethane	1.53E-05	4.42E-04	3.95E-04	
1,1-Dichloroethane	1.13E-05	3.27E-04	2.92E-04	
1,2-Dichloroethane	1.13E-05	3.27E-04	2.92E-04	
1,2-Dichloropropane	1.30E-05	3.76E-04	3.36E-04	
1,3-Butadiene	6.63E-04	1.92E-02	1.71E-02	
1,3-Dichloropropene	1.27E-05	3.67E-04	3.28E-04	
2,2,4-Trimethylpentane	0.00E+00	0.00E+00	0.00E+00	
Acetaldehyde	2.79E-03	8.07E-02	7.21E-02	
Acrolein	2.63E-03	7.60E-02	6.80E-02	
Benzene	1.58E-03	4.57E-02	4.08E-02	
Biphenyl	0.00E+00	0.00E+00	0.00E+00	
Carbon Tetrachloride	1.77E-05	5.12E-04	4.57E-04	
Chlorobenzene	1.29E-05	3.73E-04	3.33E-04	
Chloroethane	0.00E+00	0.00E+00	0.00E+00	
Chloroform	1.37E-05	3.96E-04	3.54E-04	
Ethylbenzene	2.48E-05	7.17E-04	6.41E-04	
Ethylene Dibromide	2.13E-05	6.16E-04	5.50E-04	
Formaldehyde	2.05E-02	5.93E-01	5.30E-01	
Methanol	3.06E-03	8.85E-02	7.91E-02	
Methylene Chloride	4.12E-05	1.19E-03	1.06E-03	
n-Hexane	0.00E+00	0.00E+00	0.00E+00	
Naphthalene	9.71E-05	2.81E-03	2.51E-03	
Phenol	0.00E+00	0.00E+00	0.00E+00	
Styrene	1.19E-05	3.44E-04	3.08E-04	
Toluene	5.58E-04	1.61E-02	1.44E-02	
Vinyl Chloride	7.18E-06	2.08E-04	1.86E-04	
Xylene	1.95E-04	5.64E-03	5.04E-03	
·	Total HAPs:	0.934	0.835	

#### Methodology

Emission Factors are from AP 42 Tables 3.2-1, 3.2-2 and 3.2-3, revised July 2000  $\,$ 

 $\label{eq:emission} Emission \ (tons/yr) = [Heat \ input \ rate \ (MMBtu/hr) \ x \ Emission \ Factor \ (lb/MMBtu)] \ * \ 8760 \ hr/yr \ / \ (2,000 \ lb/ton \ )$ 

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

## Indiana Department of Environmental Management Office of Air Quality

## Technical Support Document (TSD) for a Federally Enforceable State Operating Permit (FESOP) Renewal

#### **Source Background and Description**

Source Name: Vectren Corporation, d.b.a. Indiana Gas Company, Incorporated

Source Location: 7955 East Maloney Road, Brownsburg, Indiana 46112

County: Hendricks SIC Code: 4924

Operation Permit No.: F 063-14115-00018
Permit Reviewer: CarrieAnn Ortolani

The Office of Air Quality (OAQ) has reviewed a FESOP renewal application from Vectren Corporation, d.b.a. Indiana Gas Company, Incorporated relating to the operation of a natural gas distribution source. The original FESOP 063-6134-00018, issued on December 9, 1996, expires on December 9, 2001. This source was previously known as Indiana Gas Company, Inc., Hendricks County Junction.

#### **Permitted Emission Units and Pollution Control Equipment**

Two (2) previously permitted engines (CE-1 and CE-2) have been removed from the source. The source now consists of the following permitted emission units and pollution control devices:

Two (2) 650 brake horsepower four (4) cycle natural gas-fired, lean burn reciprocating internal combustion engines, identified as CE-3 and CE-4, with natural gas compressors.

#### **Unpermitted Emission Units and Pollution Control Equipment**

There are no unpermitted facilities operating at this source during this review process.

#### New Emission Units and Pollution Control Equipment Receiving Prior Approval

There are no new facilities proposed at this source during this review process.

#### **Insignificant Activities**

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) One (1) gasoline emergency generator, rated at 110 horsepower.
- (b) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million British thermal units per hour and potentially emitting 0.023 tons of Ethylene Glycol per year to the atmosphere:

Vectren Corporation, d.b.a. Indiana Gas Company, Incorporated Brownsburg, Indiana

Permit Reviewer: CAO/MES

- (1) One (1) line heater, capacity: 2.0 million British thermal units per hour.
- (2) One (1) flare, capacity: 0.69 million British thermal units per hour.
- (3) One (1) line heater, capacity: 0.5 million British thermal units per hour.
- (c) Combustion source flame safety purging on startup.
- (d) The following VOC and HAP storage containers: Storage tanks with capacities less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.
- (e) The following VOC and HAP storage containers: Vessels storing lubricating oil, hydraulic oils, machining oils and machining fluids.
- (f) Closed loop heating and cooling systems.
- (g) Heat exchanger cleaning and repair.
- (h) Process vessel degassing and cleaning to prepare for internal repairs.
- (i) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (j) Purge double block and bleed valves.
- (k) Filter or coalescer media changeout.
- (I) Numerous valves and flanges.

#### **Existing Approvals**

The source has been operating under previous approvals including, but not limited to, the following:

F 063-6134-00018, issued on December 9, 1996

All conditions from previous approvals were incorporated into this FESOP except the following:

F 063-6134-00018, issued on December 9, 1996

Conditions D.1.1 and D.1.2:

The throughput of natural gas delivered to the four (4) engines shall not exceed 54.8 million cubic feet (55,800 million British thermal units) per rolling 12-month total. This is with natural gas with a heat value of 1020 British thermal units per cubic feet. This throughput is equivalent to a nitrogen dioxide source emission rate of 90.75 tons per rolling 12-month total. Therefore, the requirements of 326 IAC 2-7 do not apply.

And

The throughput of natural gas delivered to the four (4) engines shall not exceed 54.8 million cubic feet (55,800 million British thermal units) per rolling 12-month total. This is with natural gas with a heat value of 1020 British thermal units per cubic feet. This throughput is equivalent to a carbon monoxide source emission rate of 90.75 tons per rolling 12-month

total. Therefore, the requirements of 326 IAC 2-7 do not apply.

#### Reason not incorporated:

Due to a change in the AP-42 emission factors for this process, the natural gas delivered to the two (2) engines (CE-3 and CE-4) must be limited to less than 47.2 million cubic feet (48,180 million British thermal units) per consecutive twelve (12) month period, total, the natural gas heating value must be limited to no more than 1,020 British thermal units per cubic feet, and the  $NO_{\chi}$  emission rate shall not exceed 4.08 pounds per million British thermal units in order to limit the potential to emit  $NO_{\chi}$  from the two (2) engines to less than 98.3 tons per year and total source potential to emit  $NO_{\chi}$  to less than 100 tons per year. These limits will also limit the potential to emit  $PM_{10}$  from the two (2) engines to less than 0.014 tons per year, the potential to emit  $NO_{\chi}$  from the two (2) engines to less than 2.84 tons per year and the potential to emit  $NO_{\chi}$  from the two (2) engines to less than 7.64 tons per year. Therefore, the requirements of 326 IAC 2-7 (Part 70) are still not applicable.

#### **Enforcement Issue**

There are no enforcement actions pending.

#### Recommendation

The staff recommends to the Commissioner that the FESOP renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP renewal application for the purposes of this review was received on March 9, 2001. Additional information was received on May 4, 2001. The application was received timely, more than nine (9) months before the December 9, 2001 expiration of the original FESOP.

#### **Emission Calculations**

See pages 1 through 4 of 4 of Appendix A of this document for detailed emissions calculations.

#### **Potential To Emit**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

The source, issued a FESOP on December 9, 1996, has opted to continue with their FESOP status, rather than applying for a Part 70 Operating Permit. Therefore, the following table also reflects the PTE after all FESOP limitations.

Pollutant	Potential To Emit (tons/year)
PM	0.313
PM <sub>10</sub>	0.108
SO <sub>2</sub>	0.025
VOC	3.49
CO	10.3
NO <sub>X</sub>	less than 100

Note: For the purpose of determining Title V applicability for particulates,  $PM_{10}$ , not PM, is the regulated pollutant in consideration.

HAPs	Potential To Emit (tons/year)
1,1,2,2-Tetrachloroethane	0.001
1,1,2-Trichloroethane	0.001
1,1-Dichloroethane	0.001
1,2-Dichloroethane	0.001
1,2-Dichloropropane	0.001
1,3-Butadiene	0.008
1,3-Dichloropropene	0.001
2,2,4-Tromethylpentane	0.007
Acetaldehyde	0.242
Acrolein	0.149
Benzene	0.013
Bipenyl	0.006
Carbon Tetrachloride	0.001
Chlorobenzene	0.001
Chloroethane	0.0001
Chloroform	0.001
Ethylbenzene	0.001
Ethylene Dibromide	0.001
Formaldehyde	1.53
Methanol	0.072
Methylene Chloride	0.001

**HAPs Potential To Emit** (tons/year) n-Hexane 0.032 Naphthalene 0.002 Phenol 0.001 Styrene 0.001 Toluene 0.012 Vinyl Chloride 0.0004 Xylene 0.005 Dichlorobenzene 0.00002 Lead 0.000007 Cadmium 0.00002 Chromium 0.00002 Manganese 0.000005 Nickel 0.00003 Ethlene Glycol 0.023

This source, otherwise required to obtain a Title V permit, agreed to accept a permit with federally enforceable limits that restrict its PTE to below the Title V emission levels. Therefore, this source was issued a Federally Enforceable State Operating Permit (FESOP), pursuant to 326 IAC 2-8. Due to a re-evaluation of the AP-42 emission factors for reciprocating engines, the limitations in the permit have been revised so that the source-wide  $NO_{\chi}$  emissions are limited to less than 100 tons per year. The source has accepted a more conservative limit in order to continue to comply with the requirements of 326 IAC 2-8, FESOP.

2.14

#### **Actual Emissions**

No previous emission data has been received from the source.

**TOTAL** 

#### **Potential to Emit After Issuance**

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Federally Enforceable State Operating Permit.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM <sub>10</sub>	SO <sub>2</sub>	VOC	СО	NO <sub>x</sub>	HAPs
Two (2) engines (CE-3 and CE-4)	0.239	0.002	0.014	2.84	7.64	less than 98.3	1.74
Insignificant Activities	0.047	0.126	0.024	0.671	2.38	1.70	0.049
Total Emissions	0.267	0.108	0.022	2.93	8.83	less than 100	Single less than 10 Total less than 25

#### **County Attainment Status**

The source is located in Hendricks County.

Pollutant	Status
PM <sub>10</sub>	Attainment
SO <sub>2</sub>	Attainment
NO <sub>2</sub>	Attainment
Ozone	Attainment
СО	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO $_{\rm X}$ ) are precursors for the formation of ozone. Therefore, VOC and NO $_{\rm X}$  emissions are considered when evaluating the rule applicability relating to the ozone standards. Hendricks County has been designated as attainment or unclassifiable for ozone.
- (b) Hendricks County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

#### **Federal Rule Applicability**

- (a) There are still no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are still no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20, 40 CFR 61 and 40 CFR Part 63) applicable to this source.

Brownsburg, Indiana Permit Reviewer: CAO/MES

#### State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting), because the potential to emit  $NO_x$  is limited to less than one hundred (100) tons per year.

326 IAC 2-8-4 (FESOP)

Pursuant to this rule, the amount of  $PM_{10}$ ,  $SO_2$ , VOC, CO and  $NO_X$  shall be limited to less than one hundred (100) tons per year. In addition, the amount of a single HAP shall be limited to less than ten (10) tons per year and the combination of all HAPs shall be limited to less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 2-7, do not apply.

- (a) The throughput of natural gas delivered to the two (2) engines (CE-3 and CE-4) shall be limited to less than a total of 47.2 million cubic feet (48,180 million British thermal units) per consecutive twelve (12) month period, the natural gas heating value shall not exceed 1,020 British thermal units per cubic feet, and the NO $_{\rm X}$  emission rate shall not exceed 4.08 pounds per million British thermal units. This will limit the potential to emit NO $_{\rm X}$  from the two (2) engines to less than 98.3 tons per year and total source potential to emit NO $_{\rm X}$  to less than 100 tons per year. These limits will also limit the potential to emit PM $_{\rm 10}$  from the two (2) engines to less than 0.002 tons per year, the potential to emit SO $_{\rm 2}$  from the two (2) engines to less than 0.014 tons per year, the potential to emit VOC from the two (2) engines to less than 7.64 tons per year. Therefore, the requirements of 326 IAC 2-7 (Part 70) are not applicable.
- (b) Pursuant to FESOP 063-6134-00018, issued on December 9, 1996, the two (2) engines (CE-3 and CE-4) shall use natural gas only.
- (c) The one (1) insignificant, gasoline emergency generator shall not operate more than five hundred (500) hours per consecutive twelve (12) month period.

#### 326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR Part 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### State Rule Applicability - Individual Facilities

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

The potential to emit  $SO_2$  is less than twenty-five (25) tons per year and ten (10) pounds per hour. Therefore, the requirements of 326 IAC 7 are not applicable.

#### State Rule Applicability - Insignificant Activities

There are no rules specifically applicable to the insignificant activities at this source. Pursuant to 326 IAC 2-8-4, FESOP, the one (1) insignificant, gasoline emergency generator shall not operate more than five hundred (500) hours per consecutive twelve (12) month period, as stated in the "State Applicability - Entire Source" section of this TSD.

#### **Testing Requirements**

There are no emissions testing requirements in this permit.

#### **Compliance Requirements**

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

There are no compliance monitoring requirements applicable to this source.

#### Conclusion

The operation of this natural gas distribution source shall be subject to the conditions of the attached proposed FESOP Renewal No.: F 063-14115-00018.

#### Appendix A: Emission Calculations Natural Gas-fired Reciprocating Engines

Company Name: Vectren Corporation, d.b.a. Indiana Gas Company, Incorporated

Address City IN Zip: 7599 East Maloney Road, Brownsburg, Indiana 46112

FESOP Renewal: F 063-14115 Plt ID: 063-00018 Reviewer: CarrieAnn Ortolani Date: March 9, 2001

#### Emissions calculated based on heat input capacity (MMBtu/hr)

Four stroke Lean Burn Engines (CE-3 and CE-4) Heat Input Capacity MM Btu/hr

6.60

Limit in Old FESOP 063-6134-00018

	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMBtu	9.91E-03	7.71E-05	5.88E-04	4.08E+00	1.18E-01	3.17E-01
Potential Emission in tons/yr	0.286	0.002	0.017	118	3.41	9.16

Four stroke Lean Burn Engines (CE-3 and CE-4) Heat Input Capacity MM Btu/hr

5.50

Limit in FESOP 063-14115

	Pollutant					
	PM	PM10	SO2	NOx	VOC	СО
Emission Factor in lb/MMBtu	9.91E-03	7.71E-05	5.88E-04	4.08E+00	1.18E-01	3.17E-01
Potential Emission in tons/yr	0.239	0.002	0.014	98.3	2.84	7.64

	Emission Factor	Potential to Emit	Potential to Emit
НАР	four stroke lean burn engines (lb/MMBtu)	in old FESOP 063-6134-00018 (tons/yr)	in FESOP 063-14115 (tons/yr)
1,1,2,2-Tetrachloroethane	4.00E-05	1.16E-03	9.64E-04
1,1,2-Trichloroethane	3.18E-05	9.19E-04	7.66E-04
1,1-Dichloroethane	2.36E-05	6.82E-04	5.69E-04
1,2-Dichloroethane	2.36E-05	6.82E-04	5.69E-04
1,2-Dichloropropane	2.69E-05	7.78E-04	6.48E-04
1,3-Butadiene	2.67E-04	7.72E-03	6.43E-03
1,3-Dichloropropene	2.64E-05	7.63E-04	6.36E-04
2,2,4-Trimethylpentane	2.50E-04	7.23E-03	6.02E-03
Acetaldehyde	8.36E-03	2.42E-01	2.01E-01
Acrolein	5.14E-03	1.49E-01	1.24E-01
Benzene	4.40E-04	1.27E-02	1.06E-02
Biphenyl	2.12E-04	6.13E-03	5.11E-03
Carbon Tetrachloride	3.67E-05	1.06E-03	8.84E-04
Chlorobenzene	3.04E-05	8.79E-04	7.32E-04
Chloroethane	1.87E-06	5.41E-05	4.50E-05
Chloroform	2.85E-05	8.24E-04	6.87E-04
Ethylbenzene	3.97E-05	1.15E-03	9.56E-04
Ethylene Dibromide	4.43E-05	1.28E-03	1.07E-03
Formaldehyde	5.28E-02	1.53E+00	1.27E+00
Methanol	2.50E-03	7.23E-02	6.02E-02
Methylene Chloride	2.00E-05	5.78E-04	4.82E-04
n-Hexane	1.11E-03	3.21E-02	2.67E-02
Naphthalene	7.44E-05	2.15E-03	1.79E-03
Phenol	2.40E-05	6.94E-04	5.78E-04
Styrene	2.36E-05	6.82E-04	5.69E-04
Toluene	4.08E-04	1.18E-02	9.83E-03
Vinyl Chloride	1.49E-05	4.31E-04	3.59E-04
Xylene	1.84E-04	5.32E-03	4.43E-03
_	Total HAPs:	2.09	1.74

#### Methodology

Emission Factors are from AP 42 Tables 3.2-1, 3.2-2 and 3.2-3, revised July 2000  $\,$ 

 $Emission \ (tons/yr) = [Heat \ input \ rate \ (MMBtu/hr) \ x \ Emission \ Factor \ (lb/MMBtu)] \ ^* \ 8760 \ hr/yr \ / \ (2,000 \ lb/ton \ )$ 

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

## Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100 Small Industrial Boiler

Company Name: Vectren Corporation, d.b.a. Indiana Gas Company, Incorporated

Address City IN Zip: 7599 East Maloney Road, Brownsburg, Indiana 46112

FESOP Renewal: 063-14115 Plt ID: 063-00018

Reviewer: CarrieAnn Ortolani

Date: March 9, 2001

**Insignificant Activities** 

Heat Input Capacity Potential Throughput

MMBtu/hr MMCF/yr

3.19 27.94

Pollutant

		i Ollulari	l .				
	PM*	PM10*	SO2	NOx	VOC	CO	l
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0	5.5	84.0	l
				**see below			
Potential Emission in tons/yr	0.027	0.106	0.008	1.40	0.077	1.17	

<sup>\*</sup>PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

#### Methodology

All emission factors are based on normal firing.

MMBtu = 1.000.000 Btu

MMCF = 1.000.000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 3 for HAPs emissions calculations.

<sup>\*\*</sup>Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

#### Page 3 of 4 TSD App A

# Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100 Small Industrial Boiler HAPs Emissions

Company Name: Vectren Corporation, d.b.a. Indiana Gas Company, Incorporated

Address City IN Zip: 7599 East Maloney Road, Brownsburg, Indiana 46112

FESOP Renewal: 063-14115

Plt ID: 063-00018

Reviewer: CarrieAnn Ortolani
Date: March 9, 2001

#### **Insignificant Activities**

HAPs - Organics

Emission Factor in lb/MMcf	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	2.934E-05	1.677E-05	1.048E-03	2.515E-02	4.751E-05

#### HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	Ethylene Glycol	Total HAPs
Potential Emission in tons/yr	6.986E-06	1.537E-05	1.956E-05	5.309E-06	2.934E-05	0.023	0.049

Methodology is the same as page 2.

The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

### Appendix A: Emissions Calculations Gasoline Generator

Company Name: Vectren Corporation, d.b.a. Indiana Gas Company, Incorporated

Address City IN Zip: 7599 East Maloney Road, Brownsburg, Indiana 46112

FESOP Renewal: 063-14115

Plt ID: 063-00018

Reviewer: CarrieAnn Ortolani

Date: March 9, 2001

Insignificant Activity
Gasoline Generator

One (1) generator at 110 horsepowers used 500 hours per year or less.

Pollutant	Emission Factor	HP	Potential Em	issions
	(lbs/HP-hr)		(lbs/hr)	(tons/yr)
VOC	0.021591	110	2.38	0.594
PM	0.000721	110	0.079	0.020
PM-10	0.000721	110	0.079	0.020
NOx	0.011	110	1.21	0.303
СО	0.0439	110	4.83	1.21
SO2	0.000591	110	0.065	0.016

AP-42 Chapter 3, Table 3.3-1